UNIVERSITY OF MINNESOTA EXTENSION

CENTER FOR COMMUNITY VITALITY

Potential Economic Impact of a Senior Living Facility in Lanesboro, Minnesota

A REPORT OF THE ECONOMIC IMPACT ANALYSIS PROGRAM

Authored by Brigid Tuck and Jennifer Hawkins
In partnership with Lanesboro Economic Development Authority

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EXECUTIVE SUMMARY: POTENTIAL ECONOMIC IMPACT OF A SENIOR LIVING FACILITY IN LANESBORO, MINNESOTA

The Lanesboro Economic Development Authority (EDA) has identified the need for senior housing in the city. A feasibility study commissioned by the EDA concluded there is sufficient demand for a full continuum retirement community. Based on this study, Lanesboro is considering a 22-unit assisted and independent living facility.

The Lanesboro EDA is interested in understanding the role a potential senior housing community would have on the local economy, particularly its impact on jobs, labor income, and the tax base. Thus, University of Minnesota Extension was hired to conduct an economic impact study. Extension used the IMPLAN model for its analysis and established Fillmore County as the study area.

Health Care in Lanesboro: Health care is the second largest industry employer in Fillmore County. The highest share of health care jobs (59 percent) are in nursing and residential care.

Potential Economic Impact of Construction: Based on data from the Small Business Development Center Network and a private developer, a 22-unit facility would cost an estimated $4.2 million to construct. The model estimates 30 construction-related jobs would be created at the facility and $1.4 million in labor income.

In total, the construction of a 22-unit senior living home will contribute an estimated $5.4 million to the economy of Fillmore County. This includes $1.7 million of labor income. The project would support 40 jobs during construction. Top industries affected will include wholesale trade, food services and drinking places, and administrative support services. Construction of the facility would generate an estimated $177,700 in state and local taxes. This includes $54,000 in sales taxes and $45,300 in property taxes.

Potential Economic Impact of Operations: Based on data from the Small Business Development Center Network and a private developer, a 22-unit facility would cost an estimated $844,800 to operate. Of that, $403,900 would be labor income. The facility will employ an estimated 13 people.

The operations of a proposed 22-unit senior living facility would generate an estimated $1.1 million of economic activity annually in Fillmore County. This includes $464,900 in new labor income and employment for 15 people. The industries most affected by the senior living facility's operations will include real estate, utilities, and wholesale trade. Wholesale trade businesses sell bulk goods, such as medical supplies and food services. Operations of the facility will generate an estimated $116,600 annually in state and local taxes. This includes $49,300 in sales taxes and $41,000 in property taxes.

Employment Considerations: Minnesota currently has a tight labor market. Statistics indicate hiring in the health care field could be difficult. This may mean the facility would need to pay higher wages to attract and retain talent.

Notes on the Analysis: The plan to build a senior living facility is currently in the concept stage. No firm design plans have been drafted and an operating budget has not been developed. The Lanesboro EDA believes understanding the potential economic impact of the facility will be useful in pursuing its development. It is important to understand this analysis estimates potential impact. Extension recommends an updated analysis once all details are finalized.

INTRODUCTION

The Lanesboro Economic Development Authority (EDA) has identified the need for senior housing in the city. A feasibility study commissioned by the EDA concluded there is sufficient demand for a full continuum retirement community. Based on fulfilling 60 percent of potential demand, study findings show the community could support 66 units of general assisted living, 65 units of memory care assisted living, and 68 units of independent living.

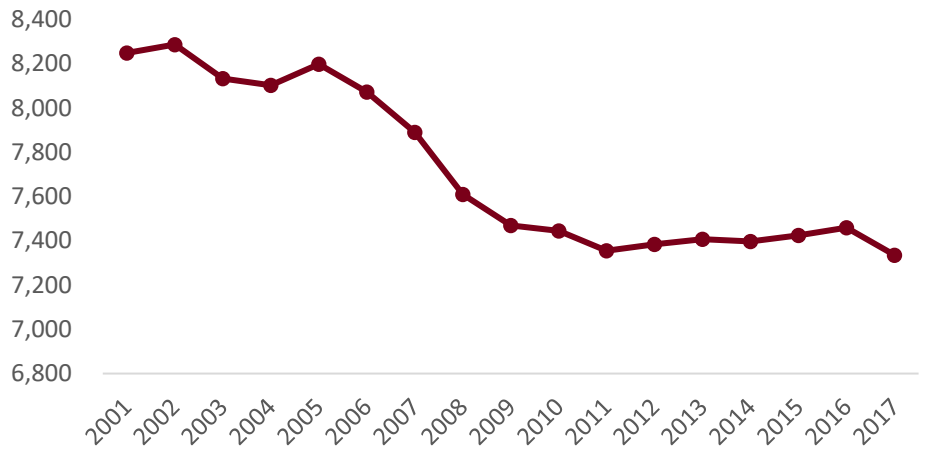
Based on its feasibility study, Lanesboro is considering a 22-unit assisted and independent living facility. The Lanesboro EDA is interested in understanding the role a potential senior housing community would have on the local economy, particularly its impact on jobs, labor income, and the tax base.

The plan to build a senior living facility is currently in the concept stage. While Extension's feasibility study shows a facility could operate in the community, no firm design plans have been drafted and an operating budget has not been developed. The Lanesboro EDA believes understanding the potential economic impact of the facility will be useful in pursuing its development. Thus, University of Minnesota Extension was hired to conduct an economic impact study. It is important to understand the analysis estimates potential impact. Once construction designs and an operating budget are determined, Extension recommends an updated analysis.

SENIOR LIVING IN FILLMORE COUNTY'S ECONOMY

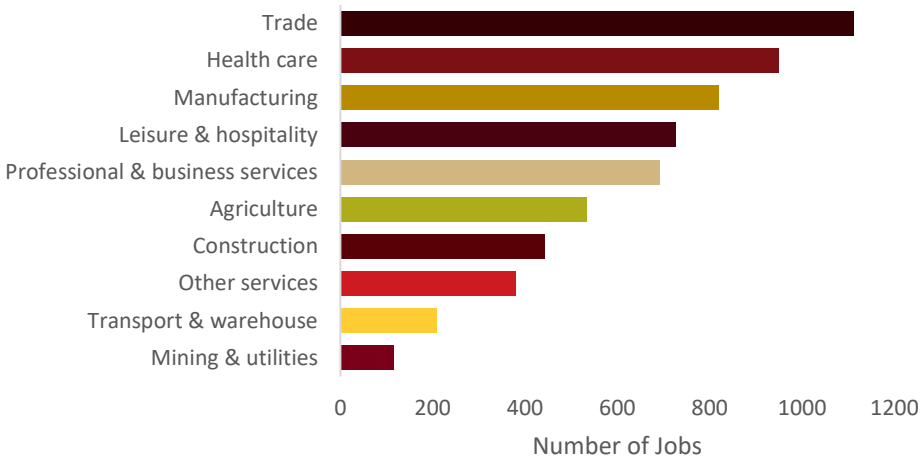
In 2017, there were 7,330 jobs in Fillmore County. Since the mid-2000s, however, the number of jobs in the county has declined (Chart 1). A peak of 8,290 jobs occurred in 2002.

Chart 1: Number of jobs, Fillmore County, 2001-2017



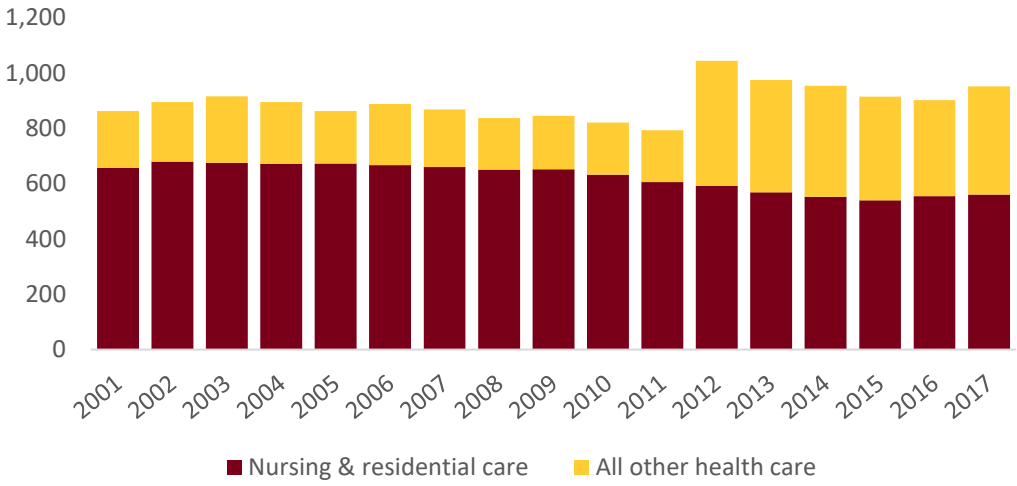
Health care, including residential housing (e.g., assisted living), is an important component of Fillmore County's economy, accounting for 13 percent of all jobs. The industry had the second highest number of employees in 2017 (Chart 2), just behind the trade industry (including retail and wholesale).

Chart 2: Employment by industry, Fillmore County, 2017



Nursing and residential care, in turn, is a significant part of Fillmore County's health care industry. In 2017, nursing and residential care accounted for 59 percent of health care jobs in the county (Chart 3).

Chart 3: Health Care jobs, Fillmore County, 2001-2017



ELEMENTS OF TOTAL ECONOMIC IMPACT

A new senior living facility will create both short and long-term impacts on the economy. Initially, the facility will add to the economy during the construction phase. Once construction is complete, these effects will dissipate. Following construction, the senior living facility will begin daily operations. These operations will have long-term annual effects on the economy, so long as the facility operates at projected levels. Because of these differences, Extension's analysis quantifies the impact of construction and operations separately.

Economic impact is comprised of direct, indirect, and induced effects.

Direct effects refer to the new economic activity that can be tied directly to the project under consideration. In this analysis, direct effects include spending for construction and operations of the facility. Once the direct effects are quantified, they are entered into the input-output model IMPLAN.[1] The model then calculates the indirect and induced effects.

Indirect effects are those associated with a change in economic activity due to spending for goods and services directly tied to the new facility. During construction, these are the changes in the local economy occurring because construction firms purchase goods (e.g., cement, wood, and nails) and related services (e.g., landscaping, accounting, and legal). As construction firms make purchases, this creates an increase in purchases across the supply chain. Indirect effects are the summary of these changes across an economy. Once the facility is operational, the indirect effects are changes in the economy due to spending to run the facility, such as electricity, medical supplies, and laundry services.

Induced effects are those associated with a change in economic activity due to spending by the employees of businesses (labor) and by households. These are economic changes related to spending by people directly employed to construct the assisted living facility. Once operations begin, spending by employees of the facility will drive induced effects. Induced effects also include household spending related to indirect effects.

Indirect and induced impacts only reflect spending within the study area (in this instance, Fillmore County). Expenditures by the construction firm, the senior living facility, and their employees outside of Fillmore County do not create these effects in the county. The input-output model adjusts accordingly.

Economic Impact of Construction

Direct Effect

Since firm design plans do not yet exist, Extension collected secondary data on construction costs. This data was provided by Fillmore County's community and business development specialist. The specialist requested research on assisted living facilities from the Small Business Development Center Network (SBDCN). SBDCN provided a report on the construction and operations of assisted living facilities.

The report indicated construction costs for a 22-unit facility would be in the range of $2.5 to $3.0 million. With this information, the Lanesboro EDA then reached out to a senior living facility project developer to verify the estimates. The developer indicated costs would be higher—in the range of $150,000 to $230,000 per unit—depending on site costs, site development needs, parking, and HVAC, among other items. These per unit costs would lead to total construction costs of $3.3 million to $5.1 million. The midpoint was $4.2 million.

Given this input, Extension used the direct construction estimates of $4.2 million in the model. Direct employment and labor income were then estimated using the IMPLAN defaults for the construction of health care structures sector.

[1] IMPLAN version 3.1 with type SAM multipliers and 2016 data was used for the analysis. Visit www.implan.com for more information.

Indirect and Induced Effects

As highlighted above, indirect and induced effects were estimated using the IMPLAN model. The results are shown below.

Total Effects

The construction of a 22-unit senior living home will contribute an estimated $5.4 million to the economy of Fillmore County. This includes $1.7 million of labor income. The project would support 40 jobs during construction (Table 1).

The model estimates 30 of the 40 jobs would be construction-related at the facility and include $1.4 million of labor income (direct effect).

Table 1: Total potential economic impact of construction of a 22-unit senior living facility in Fillmore County, Minnesota

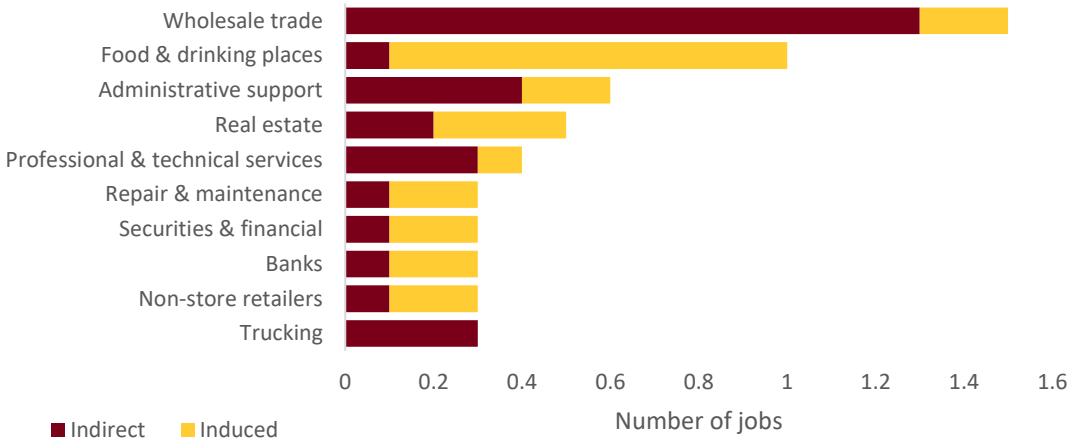
	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output (millions)	$4.2	$0.6	$0.6	$5.4
Labor Income (millions)	$1.4	$0.2	$0.1	$1.7
Employment	30	5	5	40

Estimates by University of Minnesota Extension

Top Industries Affected

Of the 40 jobs supported by construction, 30 will be at the construction site. The other 10 will be at industries across the county. Top industries affected will include wholesale trade, food and drinking places, and administrative support services (Chart 4).

Chart 4: Top industries affected, potential construction of a 22-unit senior living facility in Lanesboro, Minnesota, indirect and induced Effects, sorted by employment



Tax Impact

Construction of the facility will generate an estimated $177,700 in state and local taxes (Table 2). This includes $54,000 in sales taxes and $45,300 in property taxes.

Table 2: Total state and local tax contribution of the construction of a 22-unit senior living facility in Fillmore County, Minnesota

Metric	State and Local Taxes
Sales tax	$54,000
Property tax	$45,300
Income tax	$54,500
Corporate tax	$6,400
All other taxes	$17,500
Total	$177,700

Estimates by University of Minnesota Extension

Economic Impact of Operations

Once construction is complete, the facility will begin operations.

Direct Effect

Similar to final construction plans, an operations budget for the senior living facility has yet to be developed. To determine a potential budget for the facility, Extension followed the same procedure used to quantify construction effects. First, Extension developed a potential operating budget using the SBDCN report. This report indicated per unit monthly rental fees of $5,000 per unit. This would equate to an operating budget of $1.3 million.

The developer consulted indicated that rental revenues could vary from $2,200 to $3,100 for independent living and $3,200 to $5,000 for assisted living. Based on this input, Extension used a conservative estimate of $3,200 per unit for a total budget of $844,800. It is important to note that this budget could change, based on the number of assisted living versus independent living units.

Direct employment and labor income figures were derived from the IMPLAN model.

Indirect and Induced Effects

The IMPLAN model provides an estimate of indirect and induced effects, based on the estimated operating budget. The operating budget was entered into the nursing and residential care facilities sector in the model.

Total Effects

The operations of a proposed 22-unit senior living facility would generate an estimated $1.1 million of economic activity annually in Fillmore County. This includes $464,900 in new labor income and employment for 15 people (Table 3). These estimates are based on the assumptions already noted, which include the ongoing operation of the facility at projected levels.

The model estimates direct employment and labor income to be 13 jobs and $403,900, respectively.

Table 3: Total potential economic impact of the operations of a 22-unit senior living facility in Fillmore County, Minnesota

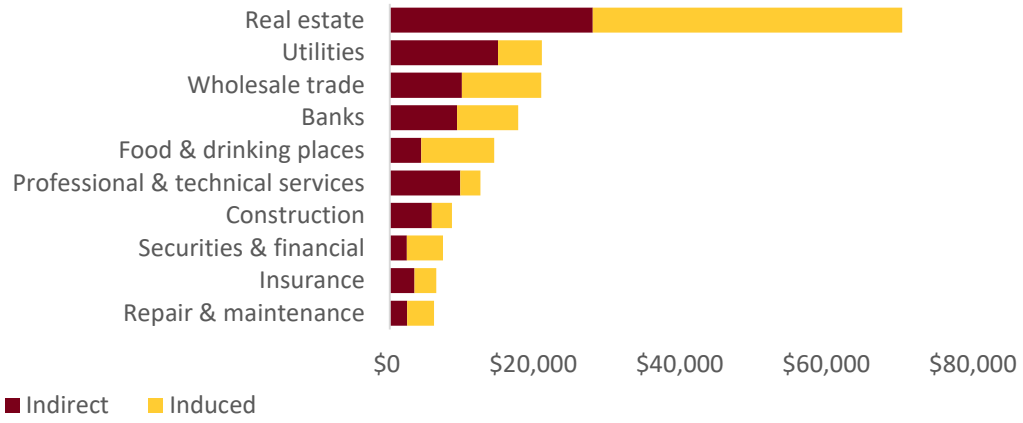
	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Output	$844,800	$110,000	$148,000	$1,102,800
Labor Income	$403,900	$28,000	$33,000	$464,900
Employment	13	1	1	15

Estimates by University of Minnesota Extension

Top Industries Affected

Of the $1.1 million of operational output effects, $844,800 is attributable to the facility's operating budget. The other $258,000 is in industries across the county. The industries most affected by the senior living facility's operations will include real estate, utilities, and wholesale trade (Chart 5). Wholesale trade businesses sell bulk goods, such as medical supplies and food services.

Chart 5: Top industries affected, operations of a potential 22-unit senior living facility in Lanesboro, Minnesota, indirect and induced effects, sorted by output



Tax Impact

Operations of the facility will generate an estimated $116,600 annually in state and local taxes (Table 4). This includes $49,300 in sales taxes and $41,000 in property taxes.

Table 4: Total state and local tax contribution of the operations of a 22-unit senior living facility in Fillmore County, Minnesota

Metric	State and Local Taxes
Sales tax	$49,300
Property tax	$41,000
Income tax	$13,700
Corporate tax	$1,100
All other taxes	$11,500
Total	$116,600

Estimates by University of Minnesota Extension

EMPLOYMENT CONSIDERATIONS

The developer contacted for this analysis expressed concerns regarding labor availability. Minnesota, including its Southeast region, has an extremely tight labor market. The December 2018 seasonally adjusted unemployment rate for the state was 2.8 percent. In Southeast Minnesota, it was 3 percent.

Statistics indicate hiring in this area may be difficult. According to the database EMSI, there are 5,880 jobs in the nursing, psychiatric, and home health aides occupation in Southeast Minnesota.[2] The concentration of jobs was 1.4, meaning the region has 40 percent more jobs than the national average. Cost of labor is also above average, with median earnings of $13.76 per hour, higher than the national median average of $12.36. Assuming the facility will hire in this occupational code, it may be harder to recruit employees and perhaps require higher wages to attract and retain talent.

[2] EMSI is Economic Modeling Systems, Incorporated. It is a private subscription service for economic developers and researchers.

APPENDIX: DEFINITIONS AND TERMS

Special models, called input-output models, exist to conduct economic impact analysis. There are several input-output models available, and IMPLAN (IMpact Analysis for PLANning, MIG, Inc.) is one such model. Many economists use IMPLAN for economic impact analysis because it can measure output and employment impacts, is available on a county-by-county basis, and is flexible for the user. While IMPLAN has some limitations and qualifications, it is one of the best tools available to economists for input-output modeling. Understanding the IMPLAN tool, its capabilities, and its limitations helps ensure the best results from the model.

One of the most critical aspects of understanding economic impact analysis is the distinction between the "local" and "non-local" economy. The local economy is identified as part of the model-building process. Either the group requesting the study or the analyst defines the local area. Typically, the study area (the local economy) is a county or a group of counties that share economic linkages. In this report, the study area is Fillmore County.

A few definitions are essential to properly interpret the results of an IMPLAN analysis. These terms and their definitions are provided below.

Output

Output is measured in dollars and is equivalent to total sales. The output measure can include significant "double counting." Think of limestone, for example. The value of limestone is counted when it is sold as a component in the manufacturing of cement, again when the cement is sold to the contractor, and yet again when the contractor charges the building owner. The value of the limestone is built into the price of each of these items, and then the sale of each item is added to determine total sales (or output).

Employment

IMPLAN includes total wage and salaried employees, as well as the self-employed, in employment estimates. Because employment is measured in jobs and not in dollar values, it tends to be a very stable metric.

Labor Income

Labor income measures the value added to the product by the labor component. So, in the limestone example, when the limestone is sold to the cement manufacturing company, a certain percentage of the sale is for the labor to quarry the limestone. Then, when the cement is sold to the contractor, it includes some markup for its labor costs in the price. When the contractor charges the building owner, he/she includes a value for the labor. These individual value increments for labor can be measured, which amounts to labor income. Labor income does *not* include double counting.

Labor income includes both employee compensation and proprietor income. It is measured as wages, salaries, and benefits.

Direct Impact

Direct impact is equivalent to the initial activity in the economy. In this study, it is the construction and operational spending for a proposed senior living facility.

Indirect Impact

The indirect impact is the summation of changes in the local economy that occur due to spending for inputs (goods and services) by the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, this implies a corresponding increase in output by the plant. As the plant increases output, it must also purchase more inputs, such as electricity, steel, and equipment. As the plant increases purchases of these items, its suppliers must also increase production, and so forth. As these ripples move through the economy, they can be captured and measured. Ripples related to the purchase of goods and services are indirect impacts. In this study, indirect impacts derive from spending by the construction firms to purchase construction materials (e.g., lumber, cement, and equipment) and construction-related services (e.g., architectural and engineering). Indirect impacts also derive from spending by the facility once it is operational.

Induced Impact

The induced impact is the summation of changes in the local economy that occur due to spending by labor—that is, spending by employees in the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, the new employees will have more money to spend on housing, groceries, and going out to dinner. As they spend their new income, more activity occurs in the local economy. This can be quantified and is called the induced impact. In this study, the induced impacts include economic changes related to spending by construction workers hired to build a senior living facility. Induced impacts also include spending by employees of the proposed senior living facility once it is operational.

Total Impact

The total impact is the summation of the direct, indirect, and induced impacts.